

*Please provide the following information, and submit to the NOAA DM Plan Repository.*

**Reference to Master DM Plan (if applicable)**

*As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.*

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

**1. General Description of Data to be Managed****1.1. Name of the Data, data collection Project, or data-producing Program:**

2012 Alaska Division of Geological and Geophysical Surveys (DGGS) Lidar: Whittier, Alaska

**1.2. Summary description of the data:**

In support of geologic mapping and hazards evaluation in and near Whittier, Alaska, the Division of Geological and Geophysical Surveys (DGGS)

acquired, and is making publicly available, lidar (light detection and ranging) data for an area along Passage Canal, Portage Lake, and

Portage Glacier Highway. The lidar data, acquired between 21 - Oct 25 2013, was processed by Watershed Sciences, Inc. (WSI) and consists of

continuous coverage encompassing an area extending from Portage Lake eastward to Logging Company Bay in Passage Canal in the Seward D-4,

D-5, and D-6 1:63,360-scale quadrangles.

Lidar data collected below 1,600 ft (488 m) elevation have a minimum average pulse density of 8 pulses/square meter; above 1,600 ft (488 m)

data were collected with an average pulse density of at least 4 pulses/square meter. Following lidar data collection and processing by WSI

and their survey subcontractor, McClintock Land Associates, WSI submitted the data to the State of Oregon Department of Geology and Mineral

Industries (DOGAMI) for independent quality control analysis. After addressing any concerns from DOGAMI, WSI submitted the revised dataset to

DGGS along with a technical report describing details about the lidar acquisition, accuracy, and quality. DOGAMI also provided a separate

report summarizing their methodologies and the results of quality control checks.

The following data classifications are available for download from the NOAA Digital Coast:

- 1 (Unclassified)
- 2 (Ground)
- 3 (Low Vegetation)
- 4 (Medium Vegetation)
- 6 (Buildings)
- 7 (Low Point/Noise)
- 9 (Water Surface)
- 10 (Ignored Ground - Ground points within 1 m of breaklines)
- 14 (Withheld - Points that have intensity values of 0 or 255)
- 15 (Mobile - Temporary Placed Structures (cars, boats, docks, buoys))
- 16 (Utilities - Man made non-habitable structures (fences, power lines))

Original contact information:

Contact Name: James Weakland

Contact Org: Alaska Division of Geological and Geophysical Surveys

Title: GIS Analyst

Phone: (907)451-5029

Email: dggsgis@alaska.gov

**1.3. Is this a one-time data collection, or an ongoing series of measurements?**

One-time data collection

**1.4. Actual or planned temporal coverage of the data:**

2012-10-21 to 2012-10-25

**1.5. Actual or planned geographic coverage of the data:**

W: -148.883498, E: -148.407257, N: 60.879156, S: 60.75784

**1.6. Type(s) of data:**

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*

**1.7. Data collection method(s):**

*(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)*

**1.8. If data are from a NOAA Observing System of Record, indicate name of system:**

**1.8.1. If data are from another observing system, please specify:****2. Point of Contact for this Data Management Plan (author or maintainer)****2.1. Name:**

NOAA Office for Coastal Management (NOAA/OCM)

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

NOAA Office for Coastal Management (NOAA/OCM)

**2.4. E-mail address:**

coastal.info@noaa.gov

**2.5. Phone number:**

(843) 740-1202

**3. Responsible Party for Data Management**

*Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.*

**3.1. Name:****3.2. Title:**

Data Steward

**4. Resources**

*Programs must identify resources within their own budget for managing the data they produce.*

**4.1. Have resources for management of these data been identified?****4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):****5. Data Lineage and Quality**

*NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.*

**5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible**

*(describe or provide URL of description):*

Process Steps:

- 2012-01-01 00:00:00 - Data acquisition and processing - This lidar dataset was collected and processed by WSI and their survey subcontractor, McClintock Land Associates (October 21-25, 2012). WSI has provided a delivery report which outlines in detail their data acquisition procedures, processing methods, and results of all accuracy assessments. The delivery report is available on the citation page for this publication.
- 2012-01-01 00:00:00 - Quality control - WSI submitted the data to the State of Oregon Department of Geology and Mineral Industries (DOGAMI) for independent quality control analysis. After addressing any concerns from DOGAMI, WSI submitted the revised data set to DGGs along with a technical report describing details about the lidar acquisition, accuracy, and quality. DOGAMI also provided a separate report summarizing their methodologies and the results of quality control checks.
- 2012-01-01 00:00:00 - Point-cloud data - all returns - classified - Lidar data points were classified (ASPRS standard) through automated point processing algorithms and manual inspection.
- 2012-01-01 00:00:00 - Point-cloud data - ground returns - classified - Lidar data points that were classified as "ground" were extracted to create the ground point data file.
- 2012-01-01 00:00:00 - Lidar intensity images - The lidar intensity values of ground points were symbolized (0-255 grayscale) according to their relative intensity values. The resultant image was exported to a raster format.
- 2013-10-01 00:00:00 - The NOAA Office for Coastal Management (OCM) received the files in las format. The files contained lidar elevation and intensity measurements. The data were in UTM Zone 6 (NAD83) coordinates and elevations were in meters, referenced to the NAVD88 (Geoid09) vertical datum. OCM performed the following processing for data storage and Digital Coast provisioning purposes: 1. The data were filtered for elevation outliers. 2. The data that were classified as 11, 12, and 13 were reclassified to classes 14, 15, and 16, respectively. The following data classifications are available for download: 1 (Unclassified), 2 (Ground), 3 (Low Vegetation), 4 (Medium Vegetation), 6 (Buildings), 7 (Low Point/Noise), 9 (Water Surface), 10 (Ignored Ground - Ground points within 1 m of breaklines), 14 (Withheld - Points that have intensity values of 0 or 255), 15 (Mobile - Temporary Places Structures (cars, boats, docks, buoys)), 16 (Utilities - Man made non-habitable structures (fences, power lines)) 3. The data were converted from GPS week time to Adjusted GPS time. 4. The data were converted from UTM Zone 6 (NAD83) coordinates to geographic coordinates. 5. The data were converted from NAVD88 (orthometric) heights to GRS80 (ellipsoid) heights using Geoid09. 6. The data were zipped to laz format.

**5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:**

**5.2. Quality control procedures employed (describe or provide URL of description):****6. Data Documentation**

*The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.*

**6.1. Does metadata comply with EDMC Data Documentation directive?**

No

**6.1.1. If metadata are non-existent or non-compliant, please explain:**

Missing/invalid information:

- 1.6. Type(s) of data
- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

**6.2. Name of organization or facility providing metadata hosting:**

NMFS Office of Science and Technology

**6.2.1. If service is needed for metadata hosting, please indicate:****6.3. URL of metadata folder or data catalog, if known:**

<https://www.fisheries.noaa.gov/inport/item/49626>

**6.4. Process for producing and maintaining metadata**

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: [https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\\_PD-Data\\_Documentation\\_v1.pdf](https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf)

**7. Data Access**

*NAO 212-15 states that access to environmental data may only be restricted when distribution is*

*explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.*

**7.1. Do these data comply with the Data Access directive?**

**7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?**

**7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:**

**7.2. Name of organization of facility providing data access:**

NOAA Office for Coastal Management (NOAA/OCM)

**7.2.1. If data hosting service is needed, please indicate:**

**7.2.2. URL of data access service, if known:**

<https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=2580>

[https://coast.noaa.gov/htdata/lidar1\\_z/geoid12b/data/2580](https://coast.noaa.gov/htdata/lidar1_z/geoid12b/data/2580)

**7.3. Data access methods or services offered:**

This data can be obtained on-line at the following URL:

<https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=2580>

This data set is dynamically generated based on user-specified parameters.

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**7.4. Approximate delay between data collection and dissemination:**

**7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:**

**8. Data Preservation and Protection**

*The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.*

**8.1. Actual or planned long-term data archive location:**

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To*

*Be Determined, Unable to Archive, or No Archiving Intended)*

**8.1.1. If World Data Center or Other, specify:**

**8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:**

**8.2. Data storage facility prior to being sent to an archive facility (if any):**

Office for Coastal Management - Charleston, SC

**8.3. Approximate delay between data collection and submission to an archive facility:**

**8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?**

*Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

## **9. Additional Line Office or Staff Office Questions**

*Line and Staff Offices may extend this template by inserting additional questions in this section.*